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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 AUG 10 Time limit for inactive STN sessions doubles to 40
minutes
NEWS 3 AUG 18 COMPENDEX indexing changed for the Corporate Source
(CS) field
NEWS 4 AUG 24 ENCOMPPLIT/ENCOMPPLIT2 reloaded and enhanced
NEWS 5 AUG 24 CA/Caplus enhanced with legal status information for
U.S. patents
NEWS 6 SEP 09 50 Millionth Unique Chemical Substance Recorded in
CAS REGISTRY
NEWS 7 SEP 11 WPIDS, WINDEX, and WPIX now include Japanese FTERM
thesaurus
NEWS 8 OCT 21 Derwent World Patents Index Coverage of Indian and
Taiwanese Content Expanded
NEWS 9 OCT 21 Derwent World Patents Index enhanced with human
translated claims for Chinese Applications and
Utility Models
NEWS 10 OCT 27 Free display of legal status information in CA/Caplus,
USPATFULL, and USPAT2 in the month of November.

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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* * * * * * * * * * * * STN Columbus * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 17:09:27 ON 27 OCT 2009

| => file reg | SINCE FILE | TOTAL |
|----------------------|------------|---------|
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.22 | 0.22 |

FILE 'REGISTRY' ENTERED AT 17:10:06 ON 27 OCT 2009
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 OCT 2009 HIGHEST RN 1190194-41-2
DICTIONARY FILE UPDATES: 26 OCT 2009 HIGHEST RN 1190194-41-2

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

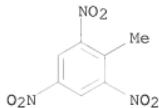
<http://www.cas.org/support/stngen/stndoc/properties.html>

```
=> s trinitrotoluene/cn
L1 1 TRINITROTOLUENE/CN
```

```
=> d 11
```

```
L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 118-96-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, 2-methyl-1,3,5-trinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, 2,4,6-trinitro- (7CI, 8CI)
OTHER NAMES:
CN α-TNT
CN 1-Methyl-2,4,6-trinitrobenzene
CN 2,4,6-Trinitrotoluene
CN 2-Methyl-1,3,5-trinitrobenzene
CN 4-Methyl-1,3,5-trinitrobenzene
CN Gradetol
CN NSC 36949
CN sym-Trinitrotoluene
CN sym-Trinitrotoluol
CN TNT
CN Tolit
CN Tolite
CN Trinitrotoluene
CN Tritol
CN Tritol (explosive)
CN Trotyl
CN Trotyl oil
MF C7 H5 N3 O6
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST,
CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, HSDB*,
IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT,
RTECS*, SPECINFO, TOXCENTER, TULSA, ULDAT, USPAT2, USPATFULL, USPATOLD
```

(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8092 REFERENCES IN FILE CA (1907 TO DATE)
110 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8116 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e dinitrotoluene/cn
E1 1 DINITROTHIOCYANOBENZENE/CN
E2 1 DINITROTREITOL/CN
E3 1 --> DINITROTOLUENE/CN
E4 1 DINITROTOLUENE SULFONATE/CN
E5 1 DINITROTOLUOL/CN
E6 1 DINITROTRIAMMINE (2-PICOLINE)COBALT NITRATE/CN
E7 1 DINITROTRIAMMINE(2-PICOLINE)COBALT BROMIDE/CN
E8 1 DINITROTRIAMMINE(2-PICOLINE)COBALT CHLORIDE/CN
E9 1 DINITROTRIAMMINE(2-PICOLINE)COBALT TETRANITRODIAMMINECOBALTA
TE(III)/CN
E10 1 DINITROTRIAMMINE(3-PICOLINE)COBALT BROMIDE/CN
E11 1 DINITROTRIAMMINE(3-PICOLINE)COBALT CHLORIDE/CN
E12 1 DINITROTRIAMMINE(3-PICOLINE)COBALT IODIDE/CN

=> s e3
L2 1 DINITROTOLUENE/CN

=> d 12

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 25321-14-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzene, methyldinitro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Toluene, ar,ar-dinitro- (8CI)
OTHER NAMES:
CN Dinitrophenylmethane
CN Dinitrotoluene
CN Dinitrotoluol
CN DNT
CN Methyldinitrobenzene
DR 29656-15-3
MF C7 H6 N2 O4
CI IDS, COM
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS,
CASREACT, CBNB, CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
DETERM*, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,
PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL,
USPATOLD

(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



D1-Me

2 [D1-NO2]

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1148 REFERENCES IN FILE CA (1907 TO DATE)
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1152 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e trifluoromethanesulfonic acid/cn
E1 1 TRIFLUOROMETHANESULFONATE ION/CN
E2 1 TRIFLUOROMETHANESULFONATE(1-)/CN
E3 1 --> TRIFLUOROMETHANESULFONIC ACID/CN
E4 1 TRIFLUOROMETHANESULFONIC ACID ((4S,5S)-2,2-DIMETHYL-1,3-DIOXOLANE-4,5-DIYL)BIS(METHYLENE) ESTER/CN
E5 1 TRIFLUOROMETHANESULFONIC ACID (1,1-DIMETHYLETHYL)DIMETHYLSILYL ESTER/CN
E6 1 TRIFLUOROMETHANESULFONIC ACID (1R)-2'-(DIPHENYLPHOSPHINYL)-3-(METHOXYMETHYL)-1,1'-BINAPHTHALENYL-2-YL ESTER/CN
E7 1 TRIFLUOROMETHANESULFONIC ACID (1R)-3'-(((1R)-2,2'-BIS(TRIFLUOROMETHYLSULFONYLOXY)-1,1'-BINAPHTHALENYL-3-YL)METHOXY)METHYL-2'-(TRIFLUOROMETHYLSULFONYL)OXY)-1,1'-BINAPHTHALENYL-2-YL ESTER/CN
E8 1 TRIFLUOROMETHANESULFONIC ACID (1R)-3'-(METHOXYMETHYL)-2'-((TRIFLUOROMETHYLSULFONYL)OXY)-1,1'-BINAPHTHALENYL-2-YL ESTER/CN
E9 1 TRIFLUOROMETHANESULFONIC ACID (1R,4R)-1,7,7-TRIMETHYLBICYCLO(2.2.1)HEPT-2-EN-2-YL ESTER/CN
E10 1 TRIFLUOROMETHANESULFONIC ACID (1R,SS)-6,6-DIMETHYLBICYCLO(3.1.1)HEPT-2-EN-2-YL ESTER/CN
E11 1 TRIFLUOROMETHANESULFONIC ACID (2,2,2-TRIFLUORO-1-(TRIFLUOROMETHYL)ETHYLIDENE)BIS(2-BROMO-4,1-PHENYLENE) ESTER/CN
E12 1 TRIFLUOROMETHANESULFONIC ACID (4-FLUOROTETRAHYDROPYRAN-4-YL)METHYL ESTER/CN

=> s e3
L3 1 "TRIFLUOROMETHANESULFONIC ACID"/CN

=> d 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 1493-13-6 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Methanesulfonic acid, 1,1,1-trifluoro- (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Methanesulfonic acid, trifluoro- (6CI, 7CI, 8CI, 9CI)
 OTHER NAMES:
 CN Fluorad FC 24
 CN Perfluoromethanesulfonic acid
 CN Triflic acid
 CN Trifluoromethanesulfonic acid
 CN Trifluoromethylsulfonic acid
 CN Trimsylate
 DR 686276-05-1, 1071724-18-9, 1075754-75-4, 132645-03-5, 146819-41-2,
 83936-79-2, 410094-25-6
 MF C H F3 O3 S
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS,
 CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSChem, DETHERM*,
 EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, IFICDB,
 IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, PS, RTECS*,
 TOXCENTER, USPAT2, USPATFULL, USPATOLD
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4832 REFERENCES IN FILE CA (1907 TO DATE)
 277 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 4845 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e nitric acid/cn

| | | |
|-----|---|--|
| E1 | 1 | NITRETAMINE/CN |
| E2 | 1 | NITREX 2612/CN |
| E3 | 1 | --> NITRIC ACID/CN |
| E4 | 1 | NITRIC ACID (H13NO3)/CN |
| E5 | 1 | NITRIC ACID (H2NO3)/CN |
| E6 | 1 | NITRIC ACID (HONO2)/CN |
| E7 | 1 | NITRIC ACID 27S/CN |
| E8 | 1 | NITRIC ACID AMMONIUM CERIUM(4+) SALT/CN |
| E9 | 1 | NITRIC ACID AMMONIUM SALT/CN |
| E10 | 1 | NITRIC ACID AMMONIUM SALT (1:1)/CN |
| E11 | 1 | NITRIC ACID AMMONIUM SALT (1:1), COMPD. WITH 2(1H)-PYRIMIDIN
ONE COPPER(2+) SALT (1:6:3)/CN |
| E12 | 1 | NITRIC ACID AMMONIUM SALT (1:1), COMPD. WITH HYDROGEN PEROXI
DE (H2O2) (1:?) /CN |

=> s e3
 L4 1 "NITRIC ACID"/CN

=> e toluene/cn

E1 1 TOLUCCANOLIDE C/CN
E2 1 TOLUCILLIN/CN
E3 1 --> TOLUENE/CN
E4 1 TOLUENE 1,2-DIOXYGENASE SYSTEM FERREDOXIN--NAD(+) REDUCTASE
COMPONENT, (TODA) (SULFOLOBUS SOLFATARICUS GENE TODA)/CN
E5 1 TOLUENE 1,2-DIOXYGENASE (PLASMID TOL PWW53 GENE XYLXI ALPHA
SUBUNIT)/CN
E6 1 TOLUENE 1,2-DIOXYGENASE (PLASMID TOL PWW53 GENE XYLYI BETA S
UBUNIT)/CN
E7 1 TOLUENE 1:1 COMPLEX WITH ARSENIC TRICHLORIDE/CN
E8 1 TOLUENE 2,3-DIOXYGENASE/CN
E9 1 TOLUENE 2,3-DIOXYGENASE, (RALSTONIA SP. JS705 STRAIN JS705 G
ENE MCBA Large SUBUNIT)/CN
E10 1 TOLUENE 2,3-DIOXYGENASE, (RALSTONIA SP. JS705 STRAIN JS705 G
ENE MCBA Small SUBUNIT)/CN
E11 1 TOLUENE 2,4-DIISOCYANATE/CN
E12 1 TOLUENE 2,4-DIISOCYANATE-CASTOR OIL POLYMER/CN

=> s e3

L5 1 TOLUENE/CN

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 108-88-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN Benzene, methyl- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Toluene (8CI)

OTHER NAMES:

CN 1-Methylbenzene

CN Antisal 1a

CN CP 25

CN CP 25 (solvent)

CN Methacide

CN Methylbenzene

CN Methylbenzol

CN NSC 406333

CN Phenylmethane

CN Toluol

DR 1053657-77-4

MF C7 H8

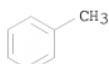
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
BIOTECHNO, CA, CABAB, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX,
CHEMLIST, CHEMSAFE, CIN, CSChem, CSNB, DDFU, DETHERM*, DRUGU, EMBASE,
ENCOMPLIT, ENCOMPLIT2, ENCOMPAT, ENCOMPATZ, GMELIN*, HSDB*, IFICDB,
IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PIRA, PROMT,
PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2,
USPATFULL, VETU

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

105050 REFERENCES IN FILE CA (1907 TO DATE)
1033 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
105486 REFERENCES IN FILE CAPLUS (1907 TO DATE)

| | | | |
|----------------------|--|------------|---------|
| => file caplus | | | |
| COST IN U.S. DOLLARS | | SINCE FILE | TOTAL |
| FULL ESTIMATED COST | | ENTRY | SESSION |
| | | 37.83 | 38.05 |

FILE 'CAPLUS' ENTERED AT 17:13:26 ON 27 OCT 2009
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FILE COVERS 1907 - 27 Oct 2009 VOL 151 ISS 18
FILE LAST UPDATED: 26 Oct 2009 (20091026/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1/prep
 8116 L1
 4871096 PREP/RL
L6 394 L1/PREP
 (L1 (L) PREP/RL)

=> d his

(FILE 'HOME' ENTERED AT 17:09:27 ON 27 OCT 2009)

FILE 'REGISTRY' ENTERED AT 17:10:06 ON 27 OCT 2009
L1 1 S TRINITROTOLUENE/CN
 E DINITROTOLUENE/CN
L2 1 S E3
 E TRIFLUOROMETHANESULFONIC ACID/CN
L3 1 S E3
 E NITRIC ACID/CN

L4 1 S E3
E TOLUENE/CN
L5 1 S E3

FILE 'CAPLUS' ENTERED AT 17:13:26 ON 27 OCT 2009
L6 394 S L1/PREP

=> s 16 and l3
4845 L3
L7 1 L6 AND L3

=> s 15 and l4
105486 L5
68075 L4
L8 1206 L5 AND L4

=> s 18 and l4
68075 L4
L9 1206 L8 AND L4

=> s 19 and l3
4845 L3
L10 31 L9 AND L3

=> d 17 ibib ab

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:55175 CAPLUS
DOCUMENT NUMBER: 142:137785
TITLE: High-purity TNT synthesis by two-step nitration with
dinitrotoluene intermediates
INVENTOR(S): Kyler, Keith S.; Wilson, Andrew R.; Teague, Curtis
PATENT ASSIGNEE(S): Bae Systems Ordnance Systems Inc., USA
SOURCE: PCT Int. Appl., 9 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2005005342 | A2 | 20050120 | WO 2004-US12425 | 20040421 |
| WO 2005005342 | A3 | 20060504 | | |

W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG

PRIORITY APPLN. INFO.: US 2003-464286P P 20030421
AB High-purity trinitrotoluene (TNT) is synthesized, in which toluene is
nitrated with nitric acid, at concentration 90-99 weight% (preferably 98-99
weight%) and ≤60° (preferably <30°) to produce high-purity
dinitrotoluene. The dinitrotoluene is then further nitrated with nitric

acid, at concentration of 98-99 weight%, in the presence of trifluoromethanesulfonic acid to produce high-purity TNT>.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l10 not 17
L11 30 L10 NOT L7

=> d l11 ibib ab tot

L11 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 20091079454 CAPLUS
DOCUMENT NUMBER: 151:313716
TITLE: Improved process for the preparation of pyridin-2-boronic acids and their derivatives
INVENTOR(S): Jaeger, Felix; Drinkuth, Stefan; Ludwig, Joachim
PATENT ASSIGNEE(S): Dr. Felix Jaeger und Dr. Stefan Drinkuth
SOURCE: Laborgemeinschaft OHG, Germany
Ger. Offen., 19pp.
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|----------------------|----------|
| DE 102008010661 | A1 | 20090903 | DE 2008-102008010661 | 20080222 |
| PRORITY APPLN. INFO.: | | | DE 2008-102008010661 | 20080222 |

OTHER SOURCE(S): CASREACT 151:313716; MARPAT 151:313716
AB Hydrolytically unstable substituted 2-pyridineboronic acids R3R4R5R6C5N-2-B(OH)2 (1, R3-R6 = H, C1-20 organyl, halo, sulfinyl, sulfonyl, carboxy, OH, etc., preferably R3-R6 = H),, useful as intermediates in synthesis of aryl-substituted pyridines, cytostatic agents and agents for boron neutron capture therapy, were prepared by a two-step process, comprising isolation and purification of stable pyridine-2-boronates [R3R4R5R6C5N-2-B(OR)3]M (5, same R3-R6; R = C1-20 alkyl, C3-8 cycloalkyl; M = Na, Li, K, ZnX, MgX) via 2-bromopyridine metatlation-boration route, followed by mild low-temperature hydrolysis of 5; the final recrystn. of 1, usually accompanied by hydrolytic deboration, can be thus avoided. The first step of the process comprises reaction of 2-bromopyridines R3R4R5R6C5N-2-Br with metatating reagents and borate esters B(OR)3 in etherial or hydrocarbon solvent, preferably at temperature from -100° to -50°, followed by recrystn. of 5 at -20 to +120° from ethers, hydrocarbons, donor solvents or alcs. The second step comprises mild hydrolysis of purified 5 at -50° to +5° in an appropriate solvent, preferably by aqueous solns. of inorg. bases, such as alkali metal carbonates or hydroxides, followed by treatment with inorg. aqueous acids, such as HCl, ammonium halides or H2PO4-. In an example, the lithium 6-methoxy-2-pyridinetrimethoxyboronate [6-MeOC5H3N-2-B(OMe)3]Li (5a) was prepared by lithiation of 40.68 mmol of 2-bromo-6-methoxypyridine by 51 mmol of BuLi/hexane at -78° for 1 h, followed by reaction with 61.0 mmol of B(OMe)3 for 2 h at -78° and recrystn. from MeOH with 82% yield. In another example, 6-methoxypyridine-2-boronic acid (1a) was prepared by hydrolysis of 5a at 0° by 40 mL of 4M NaOH for 4 h followed by addition of 14.7 mL of concentrate HCl, filtration, washing with water and vacuum drying with 68%

yield.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:827219 CAPLUS
DOCUMENT NUMBER: 151:103289
TITLE: A method of making a synthetic alkylaryl sulfonate
INVENTOR(S): Singquin, Gilles P.; Campbell, Curt B.
PATENT ASSIGNEE(S): Chevron Oronite Company LLC, USA; Chevron Oronite S.A.
SOURCE: PCT Int. Appl., 25pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--|----------|-----------------|------------|
| WO 2009085964 | A1 | 20090709 | WO 2008-US87445 | 20081218 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| US 20090163669 | A1 | 20090625 | US 2007-963240 | 20071221 |
| PRIORITY APFLN. INFO.: | | | US 2007-963240 | A 20071221 |
| AB A process for preparing a synthetic petroleum sulfonate comprises (a)
reacting a first amount of at least one aromatic compound with a first amount
of a mixture of olefins having from about 8 to about 100 carbon atoms, in the
presence of a strong acid catalyst, wherein the resulting product
comprises at least about 60% of a 1,2,4-trialkylsubstituted aromatic compound;
(b) sulfonating the product of (a); and (c) neutralizing the product of
(b) with an alkali or alkaline earth metal hydroxide or ammonia. | | | | |
| REFERENCE COUNT: 5 | THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT | | | |

L11 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:820764 CAPLUS
DOCUMENT NUMBER: 151:103288
TITLE: Method of making a synthetic alkylaryl compounds
INVENTOR(S): Singquin, Gilles P.; Campbell, Curt B.
PATENT ASSIGNEE(S): Chevron Oronite Company LLC, USA; Chevron Oronite S.A.
SOURCE: PCT Int. Appl., 22pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2009085970 | A1 | 20090709 | WO 2008-US87453 | 20081218 |

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
 CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
 FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
 KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
 ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
 PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
 TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 20090163754 A1 20090625 US 2007-963340 20071221

PRIORITY APPLN. INFO.: US 2007-963340 A 20071221

AB Disclosed is a process for alkylating an aromatic compound comprising reacting at least one aromatic compound with a mixture of C8-100 olefins, in the presence of a strong acid catalyst wherein the resulting product comprises at least about 60% 1,2,4-trialkyl-substituted aromatic compound. Thus, ortho-xylene was alkylated with C12-30 normal α -olefins in the presence of hydrofluoric acid at 65° and 5 bar to give an 77.4% 1,2,4-alkyl aromatic content and 22.6% 1,2,3-alkyl aromatic content determined by IR and NMR.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:770074 CAPLUS

DOCUMENT NUMBER: 151:103267

TITLE: Method of making a synthetic alkylaryl sulfonate

INVENTOR(S): Singquin, Gilles P.; Campbell, Curt B.

PATENT ASSIGNEE(S): Chevron Cronite LLC, USA; Chevron Cronite S.A.

SOURCE: U.S. Pat. Appl. Publ., 8pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-----------|
| US 20090163669 | A1 | 20090625 | US 2007-963240 | 20071221 |
| WO 2009085964 | A1 | 20090709 | WO 2008-US87445 | 200801218 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: US 2007-963240 A 20071221

AB A process for preparing a synthetic petroleum sulfonate comprises (a) reacting a first amount of at least one aromatic compound with a first amount of a

mixture of olefins having from about 8 to about 100 carbon atoms, in the presence of a strong acid catalyst, wherein the resulting product

comprises at least about 60% of a 1,2,4-trialkylsubstituted aromatic compound;
(b) sulfonating the product of (a); and (c) neutralizing the product of
(b) with an alkali or alkaline earth metal hydroxide or ammonia.

L11 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:769630 CAPLUS
DOCUMENT NUMBER: 151:80453
TITLE: Method of making a synthetic alkylaryl compounds
INVENTOR(S): Singquin, Gilles P.; Campbell, Curt B.
PATENT ASSIGNEE(S): Chevron Cronite Company LLC, USA; Chevron Cronite S.A.
SOURCE: U.S. Pat. Appl. Publ., 6pp.
CODEN: USXXC0
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-----------|
| US 20090163754 | A1 | 20090625 | US 2007-963340 | 20071221 |
| WO 2009085970 | A1 | 20090709 | WO 2008-US87453 | 200801218 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, IU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: US 2007-963340 A 20071221
AB Disclosed is a process for alkylating an aromatic compound comprising reacting
at least one aromatic compound with a mixture of C8-100 olefins, in the
presence
of a strong acid catalyst wherein the resulting product comprises at least
about 60% 1,2,4-trialkyl-substituted aromatic compound. Thus, ortho-xylene was
alkylated with C12-30 normal α -olefins in the presence of
hydrofluoric acid at 65° and 5 bar to give an 77.4% 1,2,4-alkyl
aromatic content and 22.6% 1,2,3-alkyl aromatic content determined by IR and
NMR.

L11 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:140205 CAPLUS
DOCUMENT NUMBER: 150:193844
TITLE: A method of making a synthetic alkylaryl compound
INVENTOR(S): Campbell, Curt B.; Singquin, Gilles
PATENT ASSIGNEE(S): Chevron Cronite Company LLC, USA
SOURCE: PCT Int. Appl., 25pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2009017498 | A1 | 20090205 | WO 2007-US74842 | 20070731 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, | | | | |

CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
 GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
 KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
 MG, MK, MN, MW, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
 PI, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

WO 2007-US74842

20070731

AB A process for alkylating an aromatic compound comprising reacting (a) a first amount of at least one aromatic compound with a first amount of a mixture of olefins

having from about 8 to about 100 carbon atoms, in the presence of a strong acid catalyst; and reacting the product of (a) with an addnl. amount of at least one aromatic compound and an addnl. amount of a strong acid catalyst, and optionally, with an addnl. amount of a mixture of olefins selected from olefins having from about 8 to about 100 carbon atoms, wherein the resulting product comprises at least about 8 to about 100 carbon atoms, wherein the resulting product comprises at least about 80% of a 1, 2, 4 tri-alkylsubstituted aromatic compound

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:139393 CAPLUS

DOCUMENT NUMBER: 150:193837

TITLE: A method of making a synthetic alkylaryl sulfonate

INVENTOR(S): Campbell, Curt B.; Sinquin, Gilles

PATENT ASSIGNEE(S): Chevron Cronite Company LLC, USA

SOURCE: PCT Int. Appl., 27pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2009017497 | A2 | 20090205 | WO 2007-US74800 | 20070731 |
| WO 2009017497 | A3 | 20090917 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
PI, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| US 20070282125 | A1 | 20071206 | US 2006-445794 | 20060601 |
| US 7598414 | B2 | 20091006 | | |

PRIORITY APPLN. INFO.:

US 2006-445794

TO 20060601

AB A process for preparing a synthetic petroleum sulfonate comprises the steps of: (a) reacting a first amount of at least one aromatic compound with a first amount of a mixture of olefins having from about 8 to about 100 carbon atoms,

in the presence of a strong acid catalyst; (b) reacting the product of (a) with an addnl. amount of at least one aromatic compound and an addnl. amount of strong acid catalyst and, optionally, with an addnl. amount of a mixture of olefins selected from olefins having from about 8 to about 100 carbon atoms, in the presence of a strong acid catalyst, wherein the resulting product comprises at least about 80 weight% of a 1,2,4-trialkylsubstituted aromatic compound; (c) sulfonating the product of (b); and (c) neutralizing the product of (b) with an alkali or alkaline earth metal hydroxide or ammonia.

L11 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1127444 CAPLUS

DOCUMENT NUMBER: 149:358566

TITLE: Ionic polymer membranes

INVENTOR(S): Miller, Jeffrey T.; Huff, George A.; Koros, William John; Hoppin, Charles Richard

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 11pp.

CODEN: USXKC0

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| US 20080223785 | A1 | 20080918 | US 2007-685461 | 20070313 |
| PRIORITY APPLN. INFO.: | | | US 2007-685461 | 20070313 |

AB Ionic polymer compns. that are useful for perm-selective membrane sepn.s. provide economical separation of fluid mixts. The ionic polymers comprise a plurality of repeating structural units having as a constituent part thereof of organic ionic moieties consisting of nitrogen containing anions and/or

cations. In the form of non-porous membranes, the ionic polymers facilitate recovery of purified organic and inorg. products from fluid mixts. by perm-selective membrane sepn.s. The ionic polymers may be formed by treating selected nitrogen-containing organic polymers with acids, or by treating

a polymeric material comprising a plurality of carboxylate groups with an amine. Ionic polymer compns. of the invention are particularly useful for simultaneous recovery of a permeate product of an increased concentration, and

a desired non-permeate stream, from a fluid mixture containing at least two compds. of different b.p. temps.

L11 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:237837 CAPLUS

DOCUMENT NUMBER: 148:355527

TITLE: preparation of polycyclic aromatic compounds useful as luminescent materials

INVENTOR(S): Liu, Yuanhong; Li, Guijie; Zhou, Shaolin; Su, Guowei

PATENT ASSIGNEE(S): Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Peop. Rep. China

SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 20pp.

CODEN: CNXKEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|-------|-----------------|-------|
| ----- | ---- | ----- | ----- | ----- |

CN 101125794 A CN 2007-10046011 20070914
 PRIORITY APPLN. INFO.: 20080220 CN 2007-10046011 20070914
 OTHER SOURCE(S): CASREACT 148:355527; MARPAT 148:355527
 AB The invention relates to a process for the production of polycyclic aromatic compds. I, which are useful as luminescent materials of organic electroluminescent devices. In compds. I, R1 and R2 are H, (un)substituted alkyl, etc.; R3 and R4 are linked together to form a (un)substituted (hetero)aryl, etc.; R5 is (un)substituted (hetero)aryl, etc. For instance, the invention compound II was prepared by addition of 2,3-naphthalenedicarboxaldehyde to 2-naphthalenylmagnesium bromide followed by esterification with acetic anhydride (57%) and cyclization (83%).

L11 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:1470407 CAPLUS
 DOCUMENT NUMBER: 148:129385
 TITLE: Novel ionic liquids based on bis(trifluoromethylsulfonyl)imides of betaines, preparation and use for solubilization of metal oxides and hydroxides
 INVENTOR(S): Binnemann, Koen; Goerller-Walrand, Christiane Anna;
 Nockemann, Peter; Thijss, Ben
 PATENT ASSIGNEE(S): Katholieke Universiteit Leuven, Belg.
 SOURCE: PCT Int. Appl., 73 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2007147222 | A2 | 20071227 | WO 2007-BE62 | 20070621 |
| WO 2007147222 | A9 | 20080214 | | |
| WO 2007147222 | A3 | 20080703 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
TR, TT, TZ, UA,UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
Bj, Cf, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |

PRIORITY APPLN. INFO.: GB 2006-12305 A 20060621

OTHER SOURCE(S): CASREACT 148:129385; MARPAT 148:129385

AB The present invention provides for novel organic salts, more specifically ionic liqs. and for methods for the preparation of such novel ionic liqs. The invention also provides for the use of the ionic liqs. in chemical applications, for example for the solubilization of metal oxides, hydroxides and salts, for the deposition of metals or for extraction procedures, among others. The invention also provides for a method for the solubilization of metal oxides and metal salts, for the deposition of metals and for extraction procedures, this by using the novel ionic liqs. The present invention also provides for materials obtained by the methods hereof. Synthesis and applications of organic salts of formula R1R2R3R4Y+X- are presented. Y = N, P, As, or Sb; R1, R2, R3 = C1-12 alkyl or C3-12 cycloalkyl, or R1 and R2, R1 and R3, R2 and R3 can form a cyclic

structure; R4 = C1-12 alkyl-COOH, C3-12 cycloalkyl-COOH, and is optionally substituted with one or more OH or carbonyl functions; X- may be organic sulfonate, sulfate, carboxylate, sulfonylimide, or tetrafluoroborate. Betaine bis(trifluoromethylsulfonyl)imide was prepared from betaine hydrochloride and lithium bis(trifluoromethylsulfonyl)imide by stirring the mixture of the aqueous solns. for one hour at room temperature, and further separation of the ionic liquid from the aqueous phase. D. of betaine bis(trifluoromethylsulfonyl)imide is 1.531 g/cm³ at 60°, and its viscosity is 351 cP at 60°.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:1391739 CAPLUS
 DOCUMENT NUMBER: 148:35428
 TITLE: Preparation of alkylaryl compounds by alkylation of aromatics with olefins
 INVENTOR(S): Campbell, Curt B.; Sinquin, Gilles
 PATENT ASSIGNEE(S): Chevron Cronite Company LLC, USA
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| US 20070282144 | A1 | 20071206 | US 2006-445711 | 20060601 |
| US 7495140 | B2 | 20090224 | | |
| US 20090186983 | A1 | 20090723 | US 2009-353522 | 20090114 |

PRIORITY APPLN. INFO.: US 2006-445711 A3 20060601
 AB An aromatic compound is alkylated by steps, reacting (a) a first amount of ≥1 aromatic compound with a first amount of a mixture of olefins having 8-100 carbon atoms, in the presence of a strong acid catalyst; and reacting the product of (a) with an addnl. amount of ≥1 aromatic compound and an addnl. amount of a strong acid catalyst, and optionally, with an addnl. amount of a mixture of olefins selected from olefins having 8-100 carbon atoms, wherein the resulting product comprises ≥80% of a 1,2,4 tri-alkylsubstituted aromatic compound.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:1391358 CAPLUS
 DOCUMENT NUMBER: 148:35426
 TITLE: Method of making a synthetic alkylaryl sulfonate
 INVENTOR(S): Campbell, Curt B.; Sinquin, Gilles
 PATENT ASSIGNEE(S): Chevron Cronite Company LLC, USA
 SOURCE: U.S. Pat. Appl. Publ., 9 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| US 20070282125 | A1 | 20071206 | US 2006-445794 | 20060601 |
| US 7598414 | B2 | 20091006 | | |

| | | | | |
|---------------|--|----------|-----------------|----------|
| WO 2009017497 | A2 | 20090205 | WO 2007-US74800 | 20070731 |
| WO 2009017497 | A3 | 20090917 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HH, HR, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |

US 20090209778 A1 20090820 US 2009-427864 20090422

PRIORITY APPLN. INFO.: US 2006-445794 TO 20060601

AB A process for preparing a synthetic petroleum sulfonate comprises the steps of: (a) reacting a first amount of at least one aromatic compound with a first amount of a mixture of olefins having from about 8 to about 100 carbon atoms, in the presence of a strong acid catalyst; (b) reacting the product of (a) with an addnl. amount of at least one aromatic compound and an addnl. amount of strong acid catalyst and, optionally, with an addnl. amount of a mixture of olefins selected from olefins having from about 8 to about 100 carbon atoms, in the presence of a strong acid catalyst, wherein the resulting product comprises at least about 80 weight% of a 1,2,4-trialkylsubstituted aromatic compound; (c) sulfonating the product of (b); and (c) neutralizing the product of (b) with an alkali or alkaline earth metal hydroxide or ammonia.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 20071159187 CAPLUS

DOCUMENT NUMBER: 147:502628

TITLE: Process for preparation of L-proline containing Bronsted acids

INVENTOR(S): Zhou, Xiaohai; Zhang, Haibo

PATENT ASSIGNEE(S): Wuhan University, Peop. Rep. China

SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 8pp.

CODEN: CNXKEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------|---------------------|----------|------------------|----------|
| CN 101050196 | A | 20071010 | CN 2007-10052178 | 20070515 |
| OTHER SOURCE(S): | CASREACT 147:502628 | | CN 2007-10052178 | 20070515 |

PRIORITY APPLN. INFO.: CN 2007-10052178 20070515

OTHER SOURCE(S): CASREACT 147:502628

AB This invention provides a process for the preparation of L-proline containing Bronsted acids with general formula of A+•X- [wherein A+ = N-protonated L-proline; X- = anion of Bronsted acid HX] comprising one-step neutralization reaction of L-proline with Bronsted acids under mild conditions. For example, L-proline was reacted with 40% hydrobromic acid to give L-proline hydrobromide (94%). Acetic acid was reacted with 1-octanol in the obtained L-proline hydrobromide to give octyl acetate with 100% selectivity (97%). The compds. are useful ionic liqs. The process has the advantages of simple operation, no pollution, low resource consumption, and low cost.

L11 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:87451 CAPLUS
 DOCUMENT NUMBER: 146:184382
 TITLE: Bronsted acidic room temperature ionic liquids each having a n-protonated lactam cation and method for preparing them
 INVENTOR(S): Deng, Youquan; Du, Zhengyin; Guo, Shu; Li, Zuopeng; Zhu, Laiying
 PATENT ASSIGNEE(S): Lanzhou Institute of Chemical Physics Chinese Academy of Sciences, Peop. Rep. China
 SOURCE: U.S. Pat. Appl. Publ., 6pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 CODEN: USXXCO
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|------------|
| US 20070021604 | A1 | 20070125 | US 2005-185692 | 20050721 |
| US 7220869 | B2 | 20070522 | | |
| CN 1772739 | A | 20060517 | CN 2004-10092789 | 20041112 |
| PRIORITY APPLN. INFO.: | | | CN 2004-10092789 | A 20041112 |

OTHER SOURCE(S): CASREACT 146:184382; MARPAT 146:184382

AB The invention relates to a class of Bronsted acidic ionic liqs. of formula I, each having a lactam cation, and to a method for preparing the same through simple neutralization reaction of a lactam, which is available in large scale from industry, with a Broensted inorg. or organic acid under room temperature Compds. of formula I wherein R is H and alkyl; n is 1 to 5; X⁻ is an anion of Bronsted acid HX; are claimed. Lactam Bronsted acidic ionic liqs. were prepared from 2-pyrrolidinone, caprolactam, octanolactam and 4-methylpyrrolidin-2-one with various Bronsted acids. The properties of the lactam Broensted acidic ionic liqs. are as follows: they are water- and moisture-stable; they are more environmentally benign and lower cost than that of dialkylimidazolium salts; they have stronger Broensted acidity and can be used as acidic catalysts and media instead of inorg. corrosive acids, such as concentrated sulfuric acid and hydrofluoric acid, in many acid-catalyzed reactions; and they can also be used as green media for extraction and separation

L11 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:889651 CAPLUS
 DOCUMENT NUMBER: 145:248957
 TITLE: Preparation of α-chloroacetophenone
 INVENTOR(S): Zou, Xinzhuo; Xu, Zijin
 PATENT ASSIGNEE(S): East China Normal University, Peop. Rep. China
 SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 9pp.
 CODEN: CNXKEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|------------------|----------|
| CN 1699322 | A | 20051123 | CN 2005-10025531 | 20050429 |
| CN 1314649 | C | 20070509 | | |

PRIORITY APPLN. INFO.: CN 2005-10025531 20050429
 OTHER SOURCE(S): CASREACT 145:248957; MARPAT 145:248957

AB The title preparation method includes mixing (un)substituted acetophenone, acid (hydrochloric acid, sulfuric acid, nitric acid, phosphoric acid, formic acid, etc.), 1,3-dichloro-5,5-dimethylhydantoin (DCDMH) at a molar ratio

of 1:(0.1-1.0):(0.5-1.0) to react at 10-100°C for 4-8 h; vacuum filtering; washing filter residue with ice water to neutrality; filtering; drying the filter cake to obtain α -chloroacetophenone with yield of 65-94%; neutralizing filtrate with sodium carbonate; vacuum filtering to remove water; washing residue with acetone; filtering; recovering hydantoin; and chloridizing with chlorine gas to obtain DCDMH for cycle reutilization. This invention has the advantages of high product purity and yield, no requirement for advanced device, and no pollution.

L11 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:846680 CAPLUS
 DOCUMENT NUMBER: 146:461889
 TITLE: Toluene nitration catalyzed by metal triflates
 AUTHOR(S): Li, Xiao-Qing; Du, Xiao-Hua; Xu, Zhen-Yuan
 CORPORATE SOURCE: State Key Laboratory Breeding Base of Green Chemistry-Synthesis Technology, Catalytic Hydrogenation Research Center, Zhejiang University of Technology, Hangzhou, 310014, Peop. Rep. China
 SOURCE: Youji Huaxue (2006), 26(8), 1111-1114
 PUBLISHER: Youji Huaxue Bianjibu
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 OTHER SOURCE(S): CASREACT 146:461889
 AB In this paper, the metal triflates were employed as Lewis acid catalysts for nitration of toluene with 1 equivalent of nitric acid. Zr(OTf)₄ and Sm(OTf)₃ were found to be the most effective ones among the catalysts investigated, and the conversions of toluene were 77.1% and 67.4% resp. The conversion of 100% could be reached with 98% nitric acid in refluxing 1,2-dichloroethane, while the conversion became 95.4% when toluene was used as solvent. The conversion of toluene was achieved to 89.9% with the isomer distributing of o: m: p = 44.6: 5.7: 49.7 when using Sm(OTf)₃ loading on silica gel.
 OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:212186 CAPLUS
 DOCUMENT NUMBER: 145:83119
 TITLE: Process for preparation of α -bromoacetophenones
 INVENTOR(S): Zou, Xinzhuo; Gao, Guorui
 PATENT ASSIGNEE(S): East China Normal University, Peop. Rep. China
 SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 8 pp.
 CODEN: CNXKEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------------------|----------|------------------|----------|
| ----- | ----- | ----- | ----- | ----- |
| CN 1733677 | A | 20060215 | CN 2005-10029244 | 20050831 |
| CN 1289456 | C | 20061213 | | |
| PRIORITY APPLN. INFO.: | | | CN 2005-10029244 | 20050831 |
| OTHER SOURCE(S): | CASREACT 145:83119 | | | |

AB This invention provides a process for the preparation of α -bromoacetophenones I [wherein R₁-R₃ = independently H, Me, Et, Pr, Bu, methoxy, etc.] comprising bromination of the corresponding acetophenones with 5,5-dimethyl-1,3-dibromohydantoin. For example, acetophenone was treated with 5,5-dimethyl-1,3-dibromohydantoin in methanol at 20 °C in the presence of 4-methylbenzenesulfonic acid to

give α -bromoacetophenone (88%) with high purity.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L11 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:136264 CAPLUS
DOCUMENT NUMBER: 144:192124
TITLE: Preparation of sulfoalkylpyridinium salts as ionic liquids and their application in esterification, Beckmann rearrangement and carbonylation
INVENTOR(S): Wang, Tao; Xing, Huabin; Zhou, Zhenhuan; Dai, Youyuan
PATENT ASSIGNEE(S): Tsinghua University, Peop. Rep. China
SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 15 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|------------------|----------|
| CN 1594280 | A | 20050316 | CN 2004-10049731 | 20040625 |
| PRIORITY APPLN. INFO.: | | | CN 2004-10049731 | 20040625 |
| OTHER SOURCE(S): | CASREACT 144:192124; MARPAT 144:192124 | | | |
| AB | Sulfoalkylpyridinium salts I-X- [wherein R ₁ - R ₅ = H, halo or (un)substituted alkyl; R ₆ = (un)substituted alkyl; X- = BF ₄ ⁻ , PF ₆ ⁻ , CH ₃ C ₆ H ₄ SO ₃ ⁻ , etc.], useful as solvents and catalysts in acid-catalyzed organic reactions, were prepared by treatment of sulfoalkylpyridinium inner salts II with equivalent acids. For instance, 1-(3-sulfopropyl)pyridinium inner salt [II, R ₁ - R ₅ = H, R ₆ = (CH ₂) ₃] was stirred with HBF ₄ aqueous solution at 40°C for 24 h before the water was evaporated off under vacuum. The remained residue was washed with Et ether and then distilled under vacuum to give the corresponding salt I-BF ₄ ⁻ [R ₁ - R ₅ = H, R ₆ = (CH ₂) ₃]. The invented ionic liqs. were successfully employed in esterification, Beckmann rearrangement and carbonylation, and they could be reused. | | | |

L11 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:283470 CAPLUS
DOCUMENT NUMBER: 142:355264
TITLE: Preparation of imidazolium compounds as ionic liquid and method of reaction using the same
INVENTOR(S): Yokoyama, Chiaki; Qiao, Kun
PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2005028446 | A1 | 20050331 | WO 2004-JP13467 | 20040915 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, | | | |

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

DE 112004001729 T5 20061019 DE 2004-112004001729 20040915
CN 1852898 A 20061025 CN 2004-80026973 20040915

PRIORITY APPLN. INFO.:

JP 2003-325590 A 20030918
JP 2003-374512 A 20031104
JP 2004-29219 A 20040205
JP 2004-36947 A 20040213
WO 2004-JP13467 W 20040915

OTHER SOURCE(S): MARPAT 142:355264

AB An ionic liquid represented by the following formula (I) [wherein X represents halogeno or hydroxy; Y- represents CF₃SO₃⁻, BF₄⁻, PF₆⁻, CH₃COO⁻, CF₃COO⁻, (CF₃SO₂)₂N⁻, (CF₃SO₂)₃C⁻, F⁻, Cl⁻, Br⁻, or I⁻; n is an integer of 2 to 16; and R represents Me, allyl, or vinyl] is prepared. This ionic liquid not only functions as a Broensted acid or a Lewis acid but is a liquid insol. in many organic solvents. The liquid is stable to air and water and hence useful as a catalyst or solvent for Friedel-Crafts reaction, nitration, and Beckmann rearrangement. It can be easily separated from the reaction mixture and reused. Thus, a mixture of 1-methylimidazole and 1,4-butane sultone (1:1 molar ratio) was stirred at room temperature for 24 h

to

give 100% 4-(1-methylimidazolium-3-yl)butanesulfonate as white crystals which were pulverized, washed with Et₂O a few times, mixed with CF₃CO₂H in a 1:1 molar ratio, and allowed to react at 60° for 24 h to give I (R = Me, n = 4, X = OH, Y- = CF₃SO₃⁻) (II). As an example for Friedel-Crafts reaction, a mixture of p-xylene and styrene (1:6 molar ratio) was stirred in the presence of II in a styrene/II molar ratio of 10:1 at 70° for 5 h to give 2-(2-phenylethyl)-p-xylene and (2-phenylethyl)-2-(2-phenylethyl)-p-xylene with 90.6 and 9.5% selectivity, resp., and with 96.7% conversion.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(9 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:515491 CAPLUS

DOCUMENT NUMBER: 141:54359

TITLE: Process for the preparation of rosuvastatin hemicalcium salt

INVENTOR(S): Kumar, Yatendra; Meeran, Hashim Nizar Poovanathil Nagoor; De, Shantanu; Rafeeq, Mohammad; Sathyaranayana, Swargam

PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2004052867 | A1 | 20040624 | WO 2002-IB5213 | 20021210 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, | | | | |

UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG
 CA 2509619 A1 20040624 CA 2002-2509619 20021210
 AU 2002348881 A1 20040630 AU 2002-348881 20021210
 EP 1578733 A1 20050928 EP 2002-781613 20021210
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
 CN 1742000 A 20060301 CN 2002-830195 20021210
 HU 2005000851 A2 20070828 HU 2005-851 20021210
 HU 2005000851 A3 20080228
 US 20060149065 A1 20060706 US 2005-537859 20051109
 US 7566782 B2 20090728

PRIORITY APPLN. INFO.: WO 2002-IB5213 W 20021210

OTHER SOURCE(S): CASREACT 141:54359

AB The present invention relates to a process for the preparation of rosuvastatin calcium, a promising new HMG-CoA reductase inhibitor. Thus, I was refluxed with the triphenylphosphorylhydride hexanenitrile in toluene for 24 h to give the condensed product. The condensation product was dissolved in methanol and treated with methanesulfonic acid in water and stirred for 24 h at room temperature to give the cyanoketo alc. which was reduced using diethylmethoxyborane in THF, followed by sodium borohydride to yield the cyanodiol. Concentrated HCl was added to the cyanodiol, and stirred for 12 h, and upon workup with calcium acetate gave rosuvastatin hemicalcium salt.

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(6 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:370889 CAPLUS

DOCUMENT NUMBER: 140:391491

TITLE: Convenient and scalable synthesis of ethyl N-[(2-BOC-amino)ethyl]glycinate and its hydrochloride salt

INVENTOR(S): Hudson, Robert H. E.; Viirre, Russell D.

PATENT ASSIGNEE(S): The University of Western Ontario, Can.

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2004037772 | A1 | 20040506 | WO 2003-CA1586 | 20031022 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003278025 | A1 | 20040513 | AU 2003-278025 | 20031022 |
| PRIORITY APPLN. INFO.: | | | US 2002-419960P | P 20021022 |

OTHER SOURCE(S): CASREACT 140:391491

AB The present invention discloses an improved synthesis of Et N-[(2-Boc-amino)ethyl]glycinate and its hydrochloride salt. The synthesis is based on the reductive alkylation of Boc-ethylenediamine with Et glyoxylate hydrate and furnishes the title compound in near quant. yield and high purity without chromatog. This compound is suitable, as is, for the synthesis peptide nucleic acid monomers. Further, conversion to the hydrochloride salt provides a stable, non-hygroscopic solid that is a convenient form for handling and storage.

L11 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:752297 CAPLUS

DOCUMENT NUMBER: 137:262613

TITLE: Process for the preparation of carboxylic acids by aldehyde oxidation in the presence of periodate, dichromate and acid in water

INVENTOR(S): Alsters, Paul; Schmieder-Van De Vondervoort, Elisabeth

PATENT ASSIGNEE(S): DSM Fine Chemicals Austria NFG GmbH & Co. KG, Austria

SOURCE: Eur. Pat. Appl., 6 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| EP 1245556 | A1 | 20021002 | EP 2002-4922 | 20020305 |
| EP 1245556 | B1 | 20040915 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| AT 276226 | T | 20041015 | AT 2002-4922 | 20020305 |
| US 20020143206 | A1 | 20021003 | US 2002-107429 | 20020328 |
| US 6593494 | B2 | 20030715 | | |
| JP 2002308821 | A | 20021023 | JP 2002-92113 | 20020328 |
| PRIORITY APPLN. INFO.: | | | AT 2001-506 | A 20010329 |
| | | | EP 2002-4922 | A 20020305 |

OTHER SOURCE(S): CASREACT 137:262613; MARPAT 137:262613

AB Aldehydes (e.g., 4-methoxyphenylacetaldehyde) are oxidized into their corresponding carboxylic acids (e.g., 4-methoxyphenylacetic acid) in the presence of equimolar or supermolar amts. of of a periodate (e.g., sodium periodate) and a catalytic amount of a dichromate (e.g., sodium dichromate) or CrO₃ in the presence of an acid (e.g., sulfuric acid) in water, a water-solvent mixture (e.g., water-toluene mixture), or a solvent at -20° to +50°.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:311173 CAPLUS

DOCUMENT NUMBER: 130:313480

TITLE: Continuous process for the production of carboxylic acid esters of alkylene glycol monoalkyl ethers

INVENTOR(S): Gerberich, H. Robert; Warner, R. Jay

PATENT ASSIGNEE(S): Celanese International Corporation, USA

SOURCE: PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------|--|--|------------------|------------|
| WO 9923058 | A1 | 19990514 | WO 1997-US19827 | 19971031 |
| W: CA, CN, DE, GB, JP, KR, MX, SG, US | | | | |
| CA 2307593 | A1 | 19990514 | CA 1997-2307593 | 19971031 |
| CA 2307593 | C | 20070116 | | |
| GB 2345911 | A | 20000726 | GB 2000-9596 | 19971031 |
| GB 2345911 | B | 20010718 | | |
| DE 19782298 | T0 | 20001130 | DE 1997-19782298 | 19971031 |
| DE 19782298 | B4 | 20050217 | | |
| CN 1275974 | A | 20001206 | CN 1997-182427 | 19971031 |
| CN 1107048 | C | 20030430 | | |
| JP 2001521918 | T | 20011113 | JP 2000-518935 | 19971031 |
| JP 3986756 | B2 | 20071003 | | |
| US 6444842 | B1 | 20020903 | US 2000-529899 | 20000419 |
| MX 200004210 | A | 20010930 | MX 2000-4210 | 20000428 |
| PRIORITY APPLN. INFO.: | | | WO 1997-US19827 | A 19971031 |
| OTHER SOURCE(S): | MARPAT 130:313480 | | | |
| AB | In an improved method for the preparation of carboxylic acid esters of alkylene glycol monoalkyl ethers by the acid-catalyzed esterification of alkoxycalcs. with carboxylic acids, the carboxylic acid (e.g., acetic acid) and alkoxycalc. (e.g., 1-methoxy-2-hydroxypropane) are esterified in the presence of an acid catalyst (e.g., methanesulfonic acid) in a reactor/column and the ester product (e.g., 1-methoxy-2-Pr acetate) is distilled into an overhead decanter/extractor as a single phase. A small amount of solvent, preferably a hydrocarbon (e.g., cyclohexane), is added to the mixture causing the distillate to sep. into two phases, one phase containing the product, the other containing primarily water. This process is not constrained by the difficulty of separating closely boiling azeotropes and results in substantially higher production rates than are achieved by prior-art processes. | | | |
| OS.CITING REF COUNT: | 1 | THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS) | | |
| REFERENCE COUNT: | 2 | THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT | | |

L11 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:764134 CAPLUS
DOCUMENT NUMBER: 130:10165
TITLE: Chemically sensitive sensor comprising arylene alkenylene oligomers
INVENTOR(S): De Wit, Michael; Vanneste, Emmanuel; Blockhuys, Frank; Verreyt, Gunter; Tachelet, Wim; Nagels, Luc J.; Geise, Herman J.
PATENT ASSIGNEE(S): Interuniversitair Micro-Elektronica Centrum VZW, Belg.; Universitaire Instelling Antwerpen
SOURCE: Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| EP 878711 | A1 | 19981118 | EP 1997-870082 | 19970530 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

| | | | | |
|---------------|----|----------|----------------|----------|
| US 6042788 | A | 20000328 | US 1997-985806 | 19971205 |
| JP 11072474 | A | 19990316 | JP 1998-132003 | 19980514 |
| US 6572826 | B1 | 20030603 | US 1999-448053 | 19991123 |
| US 2004042931 | A1 | 20040304 | US 2003-454762 | 20030603 |

PRIORITY APPLN. INFO.:

| | |
|----------------|-------------|
| EP 1997-870068 | A 19970515 |
| EP 1997-870082 | A 19970530 |
| US 1997-985806 | A1 19971205 |
| US 1999-448053 | A1 19991123 |

AB Chemical sensitive sensors, suitable for detecting analytes in fluids (in gaseous or liquid phase), characterized in that the chemical sensitive sensors comprise a chemical sensitive probe, which comprises one or a blend of several arylene alkylene oligomers.

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:248671 CAPLUS

DOCUMENT NUMBER: 128:246213

ORIGINAL REFERENCE NO.: 128:48705a,48708a

TITLE: Manufacture of porous polyaniline films

INVENTOR(S): Jiang, Hai; Li, Ji; Wang, Lixiang

PATENT ASSIGNEE(S): Changchun Inst. of Applied Chemistry, Chinese Academy of Sciences, Peop. Rep. China

SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 9 pp.

CODEN: CNXKEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| CN 1144228 | A | 19970305 | CN 1995-115519 | 19950825 |
| | | | CN 1995-115519 | 19950825 |

PRIORITY APPLN. INFO.:

AB Polyaniline films are prepared by: dissolving powdered polyaniline in a solvent selected from CHCl_3 , pyridine, THF, Et 3N , DMF, Me 2SO , cyclobutylsulfone, N-methylpyrrolidone, H 2SO_4 , HNO $_3$, CF 3COOH , p-toluenesulfonic acid, dodecylbenzenesulfonic acid, dodecylsulfonic acid, sulfosalicylic acid, CF $3\text{SO}_3\text{H}$, or sulfamic acid to form a 0.1-60% soln; aging the solution for 1-15 h and transferring a measured amount of the aged solution to a plastic, metal, or glass substrate and resting in a sealed box saturated with the vapor of the solvent for a predetd. period to form a film, moving the film to a 1st solidifying bath containing H 2O , MeOH, EtOH, iso-PrOH, glycerin, gasoline, petroleum ether, C 6H_6 , toluene, MeCN, decahydronaphthalene, Et 3N , and/or THF to elute solvent from the film; soaking the film in a 2nd solidifying bath containing iso-PrOH, MeOH, C 6H_6 , toluene, water, EtOH, xylene, CHCl_3 , pyridine, Et 3N , Bu 3PO_4 , DMF, Me 2SO , THF, N-methylpyrrolidone, cyclobutylsulfone, decahydronaphthalene, and/or m-cresol at 1-200°, preferably at 15-120°; and heating the treated film at 40-180° for 1-36 h. The porous membrane is suitable for use as cathodes in solid state secondary batteries.

L11 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:510696 CAPLUS

DOCUMENT NUMBER: 127:222775

ORIGINAL REFERENCE NO.: 127:43377a,43380a

TITLE: Behavior of sulfur in high-sulfur coal in a

AUTHOR(S): superacidic medium without gaseous hydrogen
Shimizu, Kiyoyuki; Iwami, Yoshihiro; Suganuma, Akira;
Saito, Ikuo

CORPORATE SOURCE: Energy Resources Dep., National Inst. Resources
Environment, Tsukuba, 305, Japan

SOURCE: Fuel (1997), 76(10), 939-943
CODEN: FUELAC; ISSN: 0016-2361

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal
LANGUAGE: English

AB A Bronsted superacid, trifluoromethanesulfonic acid (TFMS), was found to desulfurize a lignite in the presence of a hydrocarbon without gaseous hydrogen at 150–200°C under autogenous pressure of 2.6–6.6 MPa. Removal of sulfur from the coal depended on the solvent, TFMS concentration and reaction temperature. TFMS alone without solvent removed only 5.3% of sulfur as H₂S, increasing the thiophenic sulfur content of the coal. In contrast, TFMS in toluene achieved 35.4–41.3% desulfurization, mainly from sulfides. Toluene in the presence of TFMS behaves as hydrogen donor to eliminate sulfidic sulfur as H₂S, while preventing acidic cyclization of sulfides to thiophenes.

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(6 CITINGS)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:471330 CAPLUS

DOCUMENT NUMBER: 127:155873

ORIGINAL REFERENCE NO.: 127:30005a,30008a

TITLE: Crystalline metal-organic microporous materials

INVENTOR(S): Yaghi, Omar M.

PATENT ASSIGNEE(S): Nalco Chemical Company, USA

SOURCE: U.S., 20 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 5648508 | A | 19970715 | US 1995-560224 | 19951122 |
| EP 790253 | A2 | 19970820 | EP 1996-118783 | 19961122 |
| EP 790253 | A3 | 19990901 | | |
| EP 790253 | B1 | 20020206 | | |

R: DE, FR, GB, IT

PRIORITY APPLN. INFO.: US 1995-560224 A 19951122

AB Novel metal-organic microporous materials were prepared in solution using mild reaction conditions from a metal or metalloid ion with a ligand containing multidentate functional groups in the presence of a templating agent. The resultant microporous materials are useful in the purification of liqs. and gases. Thus, Co(NO₃)₂.6H₂O reacted with 1,3,5-benzenetricarboxylic acid (H₃L) in presence of pyridine templating agent in presence of polyethylene oxide in CH₂ClCH₂Cl to give microporous polymeric CoL(py)2.2/3py which was used to sep. benzene from MeCN. Zn₂L(NO₃)₃.5H₂O.0.5EtOH was prepared also.

OS.CITING REF COUNT: 34 THERE ARE 34 CAPLUS RECORDS THAT CITE THIS
RECORD (40 CITINGS)

L11 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1989:17215 CAPLUS

DOCUMENT NUMBER: 110:17215

ORIGINAL REFERENCE NO.: 110:2831a,2834a
 TITLE: Solution-processable forms of neutral and electrically conductive poly(substituted heterocycles)
 INVENTOR(S): Jen, Kwan Yue A.; Elsenbaumer, Ronald L.
 PATENT ASSIGNEE(S): Allied Corp., USA
 SOURCE: U.S., 13 pp. Cont.-in-part of U.S. Ser. No. 740,131, abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|--|-----------------|-------------|
| US 4711742 | A | 19871208 | US 1987-2529 | 19870112 |
| CA 1284398 | C | 19910521 | CA 1986-509410 | 19860516 |
| JP 61278526 | A | 19861209 | JP 1986-125595 | 19860530 |
| PRIORITY APPLN. INFO.: | | | US 1985-740131 | A2 19850531 |
| AB | Solns., which may be elec. conductive, are described which comprise an organic solvent, a polymer or copolymer formed from derivs. of 5-membered heterocyclic rings (especially poly(substituted thiophenes)) which may be doped to render it elec. conductive, and, optionally, a dissolved dopant; the solns. may be used to form elec. conductive articles by removing the solvent, leaving the solid polymer or copolymer behind, and then, if the polymer or copolymer was not doped while in solution, doping it. Application to conductive pattern formation and as electromagnetic shields is indicated. | | | |
| OS.CITING REF COUNT: | 10 | THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS) | | |
| REFERENCE COUNT: | 7 | THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT | | |

L11 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1974:14671 CAPLUS
 DOCUMENT NUMBER: 80:14671
 ORIGINAL REFERENCE NO.: 80:2465a,2468a
 TITLE: Aromatic nitration with nitric acid and trifluoromethanesulfonic acid
 AUTHOR(S): Coon, Clifford L.; Blucher, William G.; Hill, Marion E.
 CORPORATE SOURCE: Chem. Lab., Stanford Res. Inst., Menlo Park, CA, USA
 SOURCE: Journal of Organic Chemistry (1973), 38(25), 4243-8
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Nitration of aromatic compds. is accomplished by a nitrating reagent not previously reported. Two equivs of CF₃SO₃H (I) and 1 of HNO₃ combine to form a white crystalline solid that has been identified as a mixture of NO₂+CF₃SO₃⁻ (II) and the monohydrate of I. II is an excellent nitrating reagent in inert organic solvents, H₂SO₄, or I, and has been used to nitrate PhMe, C₆H₆, PhNO₂, PhCl, m-C₆H₄Me₂, and PhCF₃. Nitrations with II have been carried out over a temperature range of -110 to +30°, yields are consistently >98%, and exceptionally high positional selectivity has been demonstrated. E.g., II reacts in 1 min with PhMe in an inert organic solvent at -110, -90, or -60° to give quant. yields of O₂NC₆H₄Me that contains only 0.23, 0.36, and 0.53% of the meta isomer, resp. When the mononitration of PhMe is carried out at -110, -90, -60, -30, and 0° followed by dinitration at 0°, the combined meta-isomer percentages are 0.33, 0.51, 0.75, 1.08, and 1.33, resp.

OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS

RECORD (30 CITINGS)

L11 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1973:97303 CAPLUS
DOCUMENT NUMBER: 78:97303
ORIGINAL REFERENCE NO.: 78:15607a,15610a
TITLE: Nitration of aromatics with nitric acid and trifluoromethanesulfonic acid
INVENTOR(S): Coon, Clifford L.; Hill, Marion E.
PATENT ASSIGNEE(S): Stanford Research Institute
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| US 3714272 | A | 19730130 | US 1972-224275 | 19720207 |
| PRIORITY APPLN. INFO.: | | | US 1972-224275 | A 19720207 |

AB Two moles CF₃SO₃H reacted with HNO₃ to give a crystalline complex which nitrated PhR (R = Me, H, Cl, NO₂, CF₃) and m-xylene in organic solvents, in H₂SO₄, or in CF₃SO₃H to corresponding mono and poly nitro compds.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)